

MA335J — INSULATED WIRE AND CABLE  
(SHIPMENTS)

DEFINITIONS AND SPECIAL INSTRUCTIONS

1. Scope of survey

This survey covers establishments manufacturing and fabricating insulated wire and cable and/or apparatus wire and cordage with a copper/copper clad or aluminum/-aluminum clad core. This survey also includes optical fiber cable.

2. Figures to be reported

We prefer that a separate report be filed for each establishment. However, if you wish, you may combine two or more establishments in a single report. If you do file a combined report, you should report transfers in between the various plants as interplant transfers in sections I–VIII. Such shipments should also be included, as provided below, in those data which represent "total shipments, including interplant transfers."

If you manufacture apparatus wire and cordage, you should report:

- If you buy wire and insulate it and/or
- If you buy wire already insulated

You should report all shipments (including both domestic and export) of insulated or covered wire and cable for transmitting electrical energy, signals, or communication. Exclude bare and tinned wire and cable and ACSR.

Report interplant transfers for those shipments "shipped" for use by your own company, an affiliate, subsidiary, or parent company. The interplant transfer figure should also be included with "total shipments including interplant transfers."

Transfers to sales branch location should be excluded from interplant transfers but should be included in shipments to other companies.

*Exclude* resales — products bought and sold without further manufacture.

The value of the products shipped should be based on the net selling value, f.o.b. plant, after discounts and returns and allowances. Freight charges and excise taxes should be excluded.

Be sure to sum all of the items designated under the indicated product groups that you have reported. This total should agree with your shipments for that section. If your shipments are greater than the individual items you have reported, you may have omitted an item(s). If this is the case, please insert those items omitted. If, however, your shipments are less than the individual item reported, you may have double counted one or more items.

Item code	Product group
2298	Total electronic wire and cable
2598	Total telephone and telegraph wire and cable
3298	Total power cable
4098	Total portable power cable
4198	Total control and signal wire and cable
4298	Total building wire and cable
5298	Total apparatus wire and cable
5398	Total other wire and cable
6199	Total magnet wire
8199	Total optical fiber cable

3. Columnar structure of report

When posting your figures to the report, please be sure to report the information in the correct columns. These are:

*SECTIONS I–VIII — INSULATED WIRE AND CABLE, OTHER THAN MAGNET WIRE AND OPTICAL FIBER CABLE*

*Column 1* — Copper content (excluding insulation) in thousands of pounds for total shipments, including interplant transfers

*Column 2* — Aluminum content (excluding insulation) in thousands of pounds

For sections I, II, V, and VII, report quantity of aluminum content for:

- Item code 2298 — Total electronic wire and cable
- Item code 2598 — Total telephone and telegraph wire and cable
- Item code 4198 — Total control and signal wire and cable
- Item code 5298 — Total apparatus wire and cordage
- Metal content of "copper clad aluminum" should be reported in the aluminum column.

*Column 3* — Value in thousands of dollars for total shipments, including interplant transfer

*Column 4* — Value in thousands of dollars for interplant transfers, excluding shipments to sales branches (Total only)

*SECTION IX — MAGNET WIRE (Item codes 6106–6199)*

You should report products with thermal ratings falling between those listed in the report under the next lower rating, except that products with a thermal rating of less than 105 C should be included with 105 C products.

The U.S. Government specification for magnet wire, MW 1000, should be used as the guide for determining the thermal classification of magnet wire.

**3. Columnar structure of report — Continued****SECTION IX - MAGNET WIRE** (*Item codes 6106–6199*)  
— Continued

*Column 1* — Quantity of copper wire in thousand pounds gross weight (including insulation) for total shipments including interplant transfers

*Column 2* — Value of copper wire (including insulation) in thousands of dollars for total shipments including interplant transfers

*Column 3* — Quantity of aluminum wire in thousand pounds gross weight (including insulation) for total shipments including interplant transfers

*Column 4* — Value of aluminum wire (including insulation) in thousands of dollars for total shipments including interplant transfers

*Column 5* — Quantity of copper wire in thousand pounds gross weight for interplant transfers, excluding shipments to sales branches

*Column 6* — Quantity of aluminum wire in thousand pounds gross weight for interplant transfers, excluding shipments to sales branches

**SECTION X — OPTICAL FIBER CABLE** (*Item codes 8101–8199*)

This section provides for the collection of insulated optical fiber cable.

*Column 1* — Quantity (Report thousands of Cable Conductor Kilometers (CCKM)).

*Column 2* — Value (Report in thousands of dollars the value of optical fiber cable, including insulation).

**SECTION XI — OPTICAL FIBER** (*Item codes 9101–9102*)

This section provides for the collection of optical fiber.

*Column 2* — Value (Report in thousands of dollars the value of optical fiber).

**4. Definitions**

**INSULATED WIRE** — A rod of drawn metal filament covered with insulation.

**INSULATED CABLE** — A number of conductors twisted or grouped together.

Dual rated products should be classified according to their higher ratings.

Multi-insulated cables should be classified according to their primary insulation, i.e., the layer of material designed to do the electrical insulating, usually the first layer of material applied over the conductor.

**GROSS WEIGHT** — *Include* insulating materials but *exclude* packaging materials.

**INSULATION** — A non-conductive material usually surrounding or separating two or more conductive materials.

**THERMOPLASTIC** — Insulation that will soften and distort from its formed shape by heating above a critical temperature peculiar to the material.

**THERMOSETTING** — Insulation that will not resoften or distort from its formed shape by heating until a destructive temperature is reached.

**ARMOR** — The outer layer of a cable applied for mechanical protection, usually consisting of a layer or layers of a metallic tape, braid, or several wires.

**CROSS-LINKED** — Intermolecular bonds produced between long chain molecules in a material to increase molecular size by chemical or electron bombardment, resulting in a change in physical properties in the material usually improved properties.

**ELASTOMER** — Any elastic rubber-like substance, such as natural or synthetic rubber; when stretched to twice its length will resume approximately the original shape.

**JACKET** — A covering put around an insulated conductor for the purpose of protection and/or resistance.

**INSULATED WIRE AND CABLE** — All insulated wire and cable for transmitting electrical energy, signals, or communications. Exclude bare and tinned wire and cable and ACSR.

**ELECTRONIC WIRE AND CABLE** — All single and multi-conductor wire and cable used for transmission, reception, or reproduction of electrical frequencies (16 gauge and smaller). Excludes telephone cable. See Apparatus Wire and Cordage for larger gauges.

**SEMI-RIGID** — A cable containing a flexible inner core and a relatively inflexible sheathing.

**COAXIAL CABLE** — Cable consisting of two or more cylindrical conductors with a common axis. The two conductors are separated by a dielectric for use as high frequency transmission lines and communication systems.

**HOOKE-UP WIRE, SINGLE CONDUCTOR** — Single conductor wire (16 AWG and smaller) used for internal equipment wiring.

**4. Definitions — Continued**

**RIBBON CABLE** — A cable consisting of two or more conductors laid parallel in one plane and held in place by the insulation or some other means.

**MULTI-CONDUCTOR CABLE** — More than one conductor within a single cable complex.

**SHIELDED CABLE** — Constructed so that substantially every point on the insulation is at ground potential or some pre-determined potential with respect to ground.

**TELEPHONE WIRE AND CABLE** — All wires and cables used in the telephone industry to transmit, receive, and monitor communications signals. Excludes coaxial and other electronic wire and cable.

**DROP WIRE** — Service drop from pole to subscribers house: parallel, twisted or dumbbell style.

**BRIDLE WIRE** — For connection of open wire and terminals or protectors and as apparatus leads.

**TELEPHONE CORD SETS** — Cut lengths of wire with terminals or connectors for use in telephone hand or head set applications and telephone line cords.

**POWER CABLE (2kv or less)** — Single and multi-conductor cable rated 2kv or less, sizes 14AWG and larger, insulated with thermosetting or thermoplastic insulation, and with or without a metallic armor overall.

*Include*

- Airport lighting cable
- Bus drop cable
- Cathodic protection cable
- Network cable
- Oil tray cable
- Overhead line wire
- Pole and bracket cable
- Power tray cable
- Service drop and secondary cable (8AWG or larger)
- Submarine power cable (8AWG or larger)
- Submersible pump or water well cable (8AWG or larger)
- Weatherproof cable

*Exclude*

- Insulated single conductor with UL label
- Secondary underground distribution cables
- Single conductor multiplexed or paralleled reported as 0–2kv BX and AC wire

**POWER CABLE (2.1–15kv)** — Single and multiconductor cable rated 2.1–1.5kv, in sizes 8AWG and larger, insulated with dielectric insulation, either thermosetting or thermo-

plastic, shielded or unshielded, jacketed or unjacketed and armored or unarmored.

*Include*

- Aerial spacer cables
- Airport lighting cable
- Oil well cable — armored and unarmored
- Pole and bracket cable
- Power cable
- Street lighting cable
- Submarine power cable

*Exclude*

- Portable power cables
- UD cables
- Mine power feeder cable

**POWER CABLE (over 15kv)** — Single and multi-conductor cable rated 15.1kv and over, in sizes 2AWG and larger, insulated with dielectric insulation, thermosetting, shielded or unshielded, jacketed or unjacketed and armored or unarmored.

*Include*

- Power cable
- Submarine power cable

*Exclude*

- Portable power cables
- UD cables
- Mine power feeder cable

**POWER CABLE, UNDERGROUND CABLE (US) 0–2KV (UL listed, single conductor cable)** — Single, multiplex, or paralleled solid dielectric insulated cable with or without concentric neutral (either thermosetting or thermoplastic insulation) rated 0–2kv and specifically used for residential and/or commercial underground services and/or feeders. Exclude single conductor UL labeled USE.

**POWER CABLE, UNDERGROUND CABLE (US) OVER 2KV** — Single, multiplex, or paralleled solid dielectric insulated cable with or without concentric neutral (either thermosetting or thermoplastic insulation) rated over 2kv and designated for use as a primary distribution cable in underground locations.

**CONTROL AND SIGNAL WIRE AND CABLE** — Any solid dielectric insulated (thermosetting or thermoplastic), jacketed or unjacketed cable, multi-conductor, rated 2500V or less, sized 22AWG through 9AWG, utilized to operate control valves and relays, or to implement or record an event (but does not supply the energy being controlled in the event); also utilized to actuate, power and control railroad signaling, warning or crossing protective devices; or utilized to actuate or control fire alarm circuits.

**4. Definitions — Continued****CONTROL AND SIGNAL WIRE AND CABLE — Continued***Include*

- Signal cable — less than 16AWG or less than 2kv
- Control cable — 9AWG and smaller, 2kv or less than 300V
- Fire alarm cable
- Submarine control cable
- Instrumentation cable
- Railroad signal cable
- Traffic control and signal cable

**PORTABLE CROSS LINKED JACKETED CABLE***Include*

- Shielded and non-shielded
- Round types: SO, W, G, PG, PCG, SH, AND SH-A, B, C, D, and GGC
- Types SO, SJO, AND SJO shielded and unshielded
- Twin or triple types W and G
- Locomotive gathering reel
- Battery
- Concentric
- Elevator control
- Grounding cable
- High tension
- Trolley bus
- Magnet crane
- Motor lead
- Power jumper
- Railway utility
- Sand cutter
- Train jumper

**PORTABLE NON-CROSS LINKED JACKETED CABLE**

— All portable cable not bearing UL flexible cord or appliance wiring material label. Include thermoplastic mining machine cable; thermoplastic and thermoset mine power feeder. Exclude welding cable.

**BUILDING WIRE** — All wire and cable (601 volts or less) used within structures for light and power for permanent installation. Includes service entrance cable.

**APPARATUS WIRE AND CABLE** — Insulated wire and cable used in connecting electrical apparatus to a power source, and appliance wiring material (22AWG and heavier including motor lead and transformer lead wire). See electronic wire and cable for appliance wiring material finer than 22AWG.

**CORD SETS** — Portable cords, fitted with any type of wiring device at one or both ends.

**CORD** — A small, flexible, multiple-conductor cable.

**APPLIANCE WIRING MATERIAL** — Insulated wire and cable intended for internal wiring of appliances and equipment.

**FLEXIBLE CORDAGE** (Flexible cord, portable cord, or appliance cord) — Cordage of two or more conductors, normally used for electrical and electronic appliances, tools, and business machines.

**OTHER APPARATUS WIRE AND CORDAGE** (Including machine tool wire) — Other types such as battery cable: non-transportation uses, defroster wire, and electric furnace cable.

**OTHER WIRE AND CABLE** — Includes bulk automotive battery and ignition wire, elevator hatch and traveling cable, weatherproof cable, and air-frame, shipboard, and ground support cable.

**BULK AUTOMOTIVE PRIMARY WIRE** — Used for low voltage lighting and control circuits, including wiring for automotive harnesses.

**BULK BATTERY CABLE** — Used for positive and negative cables, switch to starter cables.

**BULK IGNITION WIRE** — High tension (5mm or 7mm) shielded or unshielded for internal combustion engines.

**BATTERY CABLE SETS** — Cut lengths of wire with ends prepared for connection between automotive battery and starter, battery and battery, battery and ground or switch to starter.

**MAGNET WIRE**, including insulated magnet strip conductor — all insulated wire of the type generally used in the winding of coils, including Litz wire and including insulated magnet sheet, strip, and foil. The thermal classification for bondable wires should be determined by the underlying insulation. Also, the combination (film-fabric) product should be classified based on the insulation on the top side.

**LITZ WIRE** — Litz wire refers to multistrand construction of small gauge film insulated wire that is precision twisted. This construction minimizes the power loss related to the "skin effect" of current at radio frequencies.

**OPTICAL FIBER** — Optical fiber used for data purposes — A long thin strand of transparent glass, plastic or other materials usually consisting of a fiber optical core and a fiber optical cladding capable of conducting light along its axial length by internal reflection, used in the transmission of voice, video, and/or data information.

**ALL GLASS OPTICAL FIBER (single mode)** — An optical fiber consisting of a glass core and glass cladding that supports the propagation of only one mode, or ray, of light at a time.

**ALL GLASS FIBER (multimode)** — An optical fiber consisting of a glass core and a glass cladding that supports the propagation of more than one mode, or ray, of light at a time.

**PLASTIC CLAD GLASS FIBER** — An optical fiber with a glass core and a plastic optical cladding.

**4. Definitions — Continued****OPTICAL FIBER — Continued**

**ALL PLASTIC OPTICAL FIBER** — An optical fiber consisting of a plastic optical core and a plastic optical cladding.

**NONCOHERENT BUNDLE** — A collection of optical fibers arranged randomly for the purpose of transmitting light but not images.

**COHERENT BUNDLE** — A collection of optical fibers arranged non-randomly to permit the transmission of images, excluding faceplates and sensors.

**FACEPLATE** — A fused coherent bundle used for the transmission of images over a short distance, excluding sensors.

**SENSORS** — Optical fibers used in apparatus designed to detect or sense environmental effects such as pressure, temperature, magnetic, electric fields, rotation, etc.

**4. Abbreviations**

<b>C</b>	Centigrade
<b>AWG</b>	American wire gauge
<b>UD</b>	Underground distribution
<b>URD</b>	Underground residential distribution
<b>UL</b>	Underwriters laboratory
<b>USE</b>	Underground service entrance cable, 75 c wet location
<b>KV</b>	Kilovolt (1000 volts)
<b>R</b>	Rubber insulated
<b>RH</b>	Rubber insulated, heat resistant cable, 75 c dry location
<b>RHH</b>	Rubber insulated, heat resistant cable, 90 c dry locations
<b>RHW</b>	Rubber insulated, heat and moisture resistant, 75 c dry and wet locations
<b>XHHW</b>	Cross-linked polyethylene insulated, 90 c dry location, 75 c wet location
<b>THHN</b>	Thermoplastic insulated, high heat resistant, nylon jacketed cable, 90 c dry location.
<b>THWN</b>	Thermoplastic insulated, heat and moisture resistant, nylon jacket cable, 75 c dry and wet location
<b>TW</b>	Thermoplastic insulated, moisture resistant cable, 60 c wet or dry location
<b>THW</b>	Thermoplastic insulated, heat and moisture resistant cable, 75 c dry and wet location

<b>SER</b>	Round service entrance cable (rubber)
<b>SEU</b>	Service entrance cable (unarmored)
<b>SEA</b>	Service entrance cable (armored)
<b>NM</b>	Designation for nonmetallic sheathed cable, building wire
<b>NMC</b>	Nonmetallic sheathed cable, corrosion resistant, 60 c wet or dry location
<b>UF</b>	Underground feeder cable, thermoplastic insulated, 60 c wet or dry location
<b>AC</b>	Alternating current
<b>MI</b>	Mineral insulated 85 c dry and wet location, 250 c special application
<b>PIC</b>	Thermoplastic insulated
<b>PULP</b>	Paper and pulp insulated

**4. Comparability**

Data reported in this survey should correspond to data reported in the Economic Census - Manufacturing Sector form. The sum of values for item codes shown in column (a) should correspond to the dollar values reported under product codes indicated in column (b) below:

Current Industrial Report (Form MA335J)	Economic Census - Manufacturing Sector
Item codes (a)	Product codes (b)
2201 through 2270	335929A 100
2501 through 2545	335929B 100
3201 through 4014	335929I 100
4111 through 4119	335929C 100
4242 through 4264	335929D 100
5221 through 5247	331491E 100
5310 through 5331	335929E 100
<sup>1</sup> 6106 through 6188	331491G 100
8101 through 8111	3359210 100
8120	3359210 100
9101 through 9102	327215A 100

<sup>1</sup> For these item codes sum of columns 2 and 4

# REFERENCE LIST

FORM **MA335J**

## INSULATED WIRE AND CABLE (SHIPMENTS)

Product code	Item code	Item description
335929A1		<b>Section I — ELECTRONIC WIRE AND CABLE, INCLUDING PRODUCTS FABRICATED FROM WIRE AND CABLE (Exclude fiber optics)</b>
		Electronic coaxial cable, armored or nonarmored
335929A100	<b>2201</b>	Rigid
335929A120	<b>2205</b>	Semirigid
		Flexible
335929A130	<b>2213</b>	135 C and over
335929A140	<b>2221</b>	Under 135 C
335929A150	<b>2225</b>	CATV/Broadcast coaxial cable
335929A160	<b>2240</b>	Antenna lead-in wire
		Hook-up wire, (single conductor, shielded and nonshielded)
335929A170	<b>2245</b>	135 C and over temperature rating
335929A180	<b>2250</b>	Under 135 C temperature rating, 16AWG and smaller
		Multiconductor electronic wire and cable (shielded and unshielded)
335929A190	<b>2253</b>	Flat and ribbon cable
		Other multiconductor electronic wire and cable
		Shielded
335929A1A0	<b>2255</b>	135 C and over temperature rating
335929A1B0	<b>2260</b>	Under 135 C temperature rating
		Nonshielded
335929A1C0	<b>2265</b>	135 C and over temperature rating
335929A1D0	<b>2270</b>	Under 135 C temperature rating
<b>XXX</b>	<b>2298</b>	<b>Total electronic wire and cable (Sum of item codes 2201–2270)</b>
335929B1		<b>Section II — TELEPHONE AND TELEGRAPH WIRE AND CABLE, INCLUDING PRODUCTS FABRICATED FROM WIRE AND CABLE (Exclude fiber optics)</b>
335929B110	<b>2501</b>	Jumper and distributing frame wire
335929B120	<b>2503</b>	Station wire and cable
335929B130	<b>2507</b>	Telephone cord sets and cordage
335929B140	<b>2509</b>	Inside wiring cable
335929B150	<b>2511</b>	Drop and bridle and duct wire
335929B160	<b>2515</b>	Rural and urban distribution wire and cable
335929B170	<b>2527</b>	Polyethylene covered exchange area and toll cable (PIC and PULP insulated)
335929B180	<b>2545</b>	Other telephone and telegraph wire and cable
<b>XXX</b>	<b>2598</b>	<b>Total telephone and telegraph wire and cable (Sum of item codes 2501–2545)</b>

## REFERENCE LIST — Continued

FORM <b>MA335J</b>		
Product code	Item code	Item description
33592918		<b>Section III — POWER WIRE AND CABLE (Exclude fiber optics)</b>
3359291810	<b>3201</b>	Paper insulated cable (all types, all voltages) Plastic and rubber insulated 2KV or less
3359291820	<b>3203</b>	Portable welding cable
3359291830	<b>3219</b>	Underground distribution cable (UD, URD), all insulations (jacketed and unjacketed, excluding single conductor UL labeled USE)
3359291840	<b>3231</b>	Thermoplastic insulated power cable (exclude underground) Thermoset, insulated power cable (exclude underground)
3359291850	<b>3233</b>	Armored, rubber and cross linked
3359291860	<b>3235</b>	Unarmored, rubber (exclude single conductor UL labeled USE)
3359291870	<b>3245</b>	Unarmored, cross linked
3359291880	<b>3246</b>	Rubber (R, RH, RHH, RHW)
3359291890	<b>3249</b>	Weatherproof cable
3359291891	<b>3257</b>	Service drop cable, thermoset and thermoplastic insulated
33592918C0	<b>3263</b>	Over 2KV Underground distribution cable (UD, URD), all insulations (jacketed and unjacketed)
33592918D0	<b>3265</b>	Thermoplastic insulated power cable (exclude underground) Thermoset, insulated power cable (exclude underground)
33592918E0	<b>3267</b>	2KV to 15KV Armored, rubber and cross linked
33592918F0	<b>3271</b>	Unarmored, rubber (exclude single conductor UL labeled USE)
33592918G0	<b>3273</b>	Unarmored, cross linked
33592918H0	<b>3275</b>	Over 15.1KV, rubber and cross linked
33592918I0	<b>3279</b>	Other power wire and cable
<b>XXX</b>	<b>3298</b>	<b>Total power wire and cable (Sum of item codes 3201–3279)</b>
		<b>Section IV — PORTABLE POWER CABLE</b>
33592918J0	<b>4011</b>	2KV or less portable cable
33592918M0	<b>4014</b>	Over 2KV portable crosslinked and non-crosslinked
<b>XXX</b>	<b>4098</b>	<b>Total portable power cable (Sum of item codes 4011 and 4014)</b>
335929C1		<b>Section V — CONTROL AND SIGNAL WIRE AND CABLE (Exclude fiber optics)</b>
335929C110	<b>4111</b>	Signal wire and cable Control wire and cable (exclude elevator cable)
335929C120	<b>4115</b>	Thermoset insulated
335929C130	<b>4119</b>	Thermoplastic insulated
<b>XXX</b>	<b>4198</b>	<b>Total control and signal wire and cable (Sum of item codes 4111–4119)</b>

**REFERENCE LIST — Continued**

FORM <b>MA335J</b>		
Product code	Item code	Item description
335929D1		<b>Section VI — BUILDING WIRE AND CABLE (<i>Exclude fiber optics</i>)</b>
		Building wire and cable
		Thermoset insulated
335929D110	<b>4242</b>	Cross-linked polyethylene (XHHW)
335929D120	<b>4244</b>	Cross-linked polyethylene (XLP, USE)
		Thermoplastic insulated
335929D130	<b>4246</b>	Flame-retardant nylon (THHN, THWN)
335929D140	<b>4248</b>	Moisture and heat resistant (TW, THW)
335929D150	<b>4254</b>	Service entrance cable (SER, SEU, ASE)
		Non-metallic branch-circuit and underground feeder
335929D160	<b>4256</b>	Type NM-B
335929D170	<b>4258</b>	Type US and NMC (corrosion resistant)
335929D181	<b>4261</b>	Metallic armored cable (AC type)
335929D183	<b>4263</b>	Metallic armored cable (MC type)
335929D190	<b>4264</b>	Other building wire and cable
<b>XXX</b>	<b>4298</b>	<b>Total building wire and cable (<i>Sum of item codes 4242–4264</i>)</b>
331491E1		<b>Section VII — APPARATUS WIRE AND CORDAGE INCLUDING PRODUCTS FABRICATED FROM WIRE AND CABLE (<i>Exclude fiber optics</i>)</b>
		Flexible cordage
331491E110	<b>5221</b>	Thermostat insulated
331491E120	<b>5223</b>	Thermoplastic (include thermoplastic elastomers)
331491E180	<b>5225</b>	Extension cord sets
331491E190	<b>5227</b>	Fixed power supply cords
331491E1A0	<b>5231</b>	Detachable power supply cords
331491E1B0	<b>5233</b>	Retractable power supply cords
		Apparatus wire
331491E130	<b>5235</b>	Appliance fixture wire
331491E145	<b>5240</b>	Appliance wiring material 14 gauge and larger (include motor lead and transformer lead wire), thermoset and thermoplastic insulated
331491E160	<b>5243</b>	Submersible pump cable
331491E170	<b>5247</b>	Other apparatus wire and cordage (include machine tool wire)
<b>XXX</b>	<b>5298</b>	<b>Total apparatus wire and cordage (<i>Sum of item codes 5221–5247</i>)</b>
335929E1		<b>Section VIII — OTHER INSULATED WIRE AND CABLE INCLUDING PRODUCTS FABRICATED FROM WIRE AND CABLE (<i>Exclude fiber optics</i>) (<i>Exclude appliance wire and cord and flexible cord sets, ignition harness sets, cable sets, etc.</i>)</b>
		Automotive
335929E110	<b>5310</b>	Bulk automotive primary wire
335929E120	<b>5312</b>	Bulk battery cable
335929E130	<b>5315</b>	Bulk ignition wire
335929E140	<b>5318</b>	Other automotive wire and cable
		Airframe, shipboard, and ground support cable (exclude coaxial cable and ignition cable)
335929E150	<b>5324</b>	Airframe and missile (include ground support cable)
335929E160	<b>5328</b>	Shipboard cable
335929E170	<b>5331</b>	Other insulated or covered wire and cable, not elsewhere classified
<b>XXX</b>	<b>5398</b>	<b>Total other insulated or covered wire and cable (<i>Sum of item codes 5310–5331</i>)</b>



# REFERENCE LIST — Continued

FORM <b>MA335J</b>		
Product code	Item code	Item description
331491G1		<b>Section IX — MAGNET WIRE</b> <i>(Include insulated magnet sheet, strip, and foil but exclude fiber optics)</i>
		Film coated (Report products with thermal rating between classes in the next lower class)
		Class 105 and below
331491G110	<b>6106</b>	7AWG and larger round (include all square and rectangular)
331491G120	<b>6108</b>	8–21AWG
331491G130	<b>6112</b>	22–32AWG
331491G140	<b>6115</b>	33AWG and finer
		Class 130–155
331491G150	<b>6117</b>	7AWG and larger round (include all square and rectangular)
331491G160	<b>6119</b>	8–21AWG
331491G170	<b>6121</b>	22–32AWG
331491G180	<b>6125</b>	33AWG and finer
		Class 180 and above
331491G190	<b>6130</b>	7AWG and larger round (include all square and rectangular)
331491G1A0	<b>6133</b>	8–21AWG
331491G1B0	<b>6154</b>	22–32AWG
331491G1C0	<b>6155</b>	33AWG and finer
331491G1I0	<b>6159</b>	Miscellaneous film coated, not elsewhere classified
		Nonfilm coated
		Class 130 and below
331491G1D0	<b>6168</b>	Fibrous
331491G1E0	<b>6172</b>	Tape
		Class 155 and above
331491G1F0	<b>6174</b>	Fibrous
331491G1G0	<b>6176</b>	Tape
331491G1H0	<b>6188</b>	Miscellaneous non-film coated, not elsewhere classified, (include insulated magnet sheet, strip, and foil)
<b>XXX</b>	<b>6199</b>	<b>Total magnet wire (Sum of item codes 6106–6188)</b>
33592101		<b>Section X — OPTICAL FIBER CABLE</b>
		Communication applications
		Single-mode stepped-index
3359210125	<b>8101</b>	Dispersion shifted
3359210128	<b>8102</b>	Dispersion unshifted
3359210131	<b>8110</b>	Multimode stepped-index
3359210134	<b>8111</b>	Multimode graded-index
3359210434	<b>8120</b>	Other applications
<b>XXX</b>	<b>8199</b>	<b>Total optical fiber cable (Sum of item codes 8101–8120)</b>
327215A2		<b>Section XI — OPTICAL CABLE</b>
327215A235	<b>9101</b>	Optical fiber used for data purposes
327215A238	<b>9102</b>	Optical fiber used for nondata purposes